Enghauser in view of Olson (U.S. Patent No. 5,984,138). Claims 1-7 were rejected under 35 U.S.C. 103(a) as being unpatentable over the art described on pages 1-2 of the present application in view of Olson.

As Claims 1-7 have been canceled without prejudice, the above art rejections have been rendered moot. However, the Applicants submit that the pending Claims 8-17 are distinguishable over the cited references for the reasons indicated below.

Independent Claim 8 of the present application recites an exhaust device for an internal combustion engine. The exhaust device includes a measuring transducer configured to analyze a flow of exhaust gases from the engine, and a pipe element adapted to carry the flow of exhaust gases from the engine. The pipe element has an integral housing in which the measuring transducer is mounted, and the housing includes a threaded hole extending through a bush made directly through a wall of the pipe element.

Independent Claim 13 of the present application recites a process for making an exhaust device for an internal combustion engine. The process comprises the step of forming an integral housing in a pipe element adapted to carry a flow of exhaust gases from the engine. The housing is formed from a flow-drilling operation comprising drilling through a wall of the pipe element with a tool at a speed and a penetration force adapted to cause melting and upsetting of a material of the wall around the tool in proportion to an advance of this tool until a bush of required height and diameter is obtained. The process further comprises the steps of tapping a hole through the bush to form internal threads in the hole, and mounting within the housing a measuring transducer configured to analyze a flow of exhaust gases from the engine.

The Applicants submit that the cited references do not anticipate or render obvious the inventions recited in Claims 8 and 13 of the present invention. The Applicants note that the

Enghauser reference, the Heinrichs reference, and the Olson reference do not disclose or suggest an exhaust device that includes a measuring transducer configured to analyze a flow of exhaust gases from the engine, and a pipe element that has an integral housing in which the measuring transducer is mounted, where the housing includes a threaded hole extending through a bush made directly through a wall of the pipe element, as expressly recited in Claim 8. Similarly, the Applicants note that the Enghauser reference, the Heinrichs reference, and the Olson reference do not disclose or suggest a process for making an exhaust device comprising the steps of forming an integral housing in a pipe element adapted to carry a flow of exhaust gases from the engine, and mounting within the housing a measuring transducer configured to analyze a flow of exhaust gases from the engine, as expressly recited in Claim 13. No disclosure or suggestion is made in these references of an exhaust device or process of making an exhaust device including a measuring transducer configured to analyze a flow of exhaust gases.

The description on pages 1-2 of the present application sets forth a brief description of a standard exhaust line. The description further sets forth the present inventors' recognition of a problem with the standard exhaust line. (See page 2, lines 10-23 of the present application.) The Applicants respectfully submit that one of skill in the art would not have been motivated to modify the standard exhaust line in the manner set forth in the Enghauser reference, the Heinrichs reference, and/or the Olson reference, at the time of the present invention, since a problem was not recognized at that time. Absent the teaching of the problem as identified by the present inventors and set forth in the present application, no motivation was present to modify the standard exhaust line. Accordingly, the Applicants respectfully submit that despite the use measuring sensors in the standard case, one of skill in the art would not have been motivated the combine the standard exhaust line with the

Enghauser reference, the Heinrichs reference, and/or the Olson reference since no motivation existed to modify the standard exhaust line.

Claims 9-12 and 14-17 are considered allowable for the reasons advanced for Claims 8 and 13 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed, taught, nor suggested by the applied references when those features are considered within the context of Claims 8 and 13.

Consequently, in view of the above discussion, it is respectfully submitted that Claims 8-17 are patentably distinguishing over the cited art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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